



## Monitoring continues to track responses to recent flows

<b>Objectives</b>	Reconnect rivers in the Lower Balonne and further downstream.
	Ensure more water stays in Lower Balonne to reach Narran Lakes to rebuild critical habitat.
<b>Target areas</b>	Lower Balonne rivers, the Darling River and Narran Lakes Ramsar Site.

### Flows have finished up

As a result of the rainfall in the Condamine-Balonne catchment in January and February 2020, there was a good flow in the Lower Balonne system that has freshened up internationally significant habitat around the Narran Lakes after a seven-year dry spell. A total of 1,442 GL flowed past St George. Of this water, around 90 GL passed into the Narran Lakes. 173 GL also passed from the Culgoa into the Barwon River. These flows were also welcomed by the local community after an extended dry.

Over 150 GL of Commonwealth water for the environment has contributed to the health of the Lower Balonne system in this flow, along with 10 GL contributed by Cubbie Station, and a similar volume from a grant along the Narran River.



Sunset over Narran Lake: NSW National Parks and Wildlife Service

Water will now sit in the Narran Lakes for several months during this cooler time of the year – offering stunning sunsets for those very few people who are

fortunate to be there during these unusual times. These flows have helped the habitat at Narran Lakes get back on track after such a prolonged dry period. This should help set the area up to benefit from future flows.

### Recent monitoring activities

#### Waterbird monitoring

NSW National Parks and Wildlife Service undertook aerial and on-ground surveys for waterbirds throughout April. Thirty species were observed despite the cooling weather. The highest overall numbers were found amongst lignum and around Black Lake and Long Arm which are renowned waterbird habitat. A notable sighting was two groups of freckled duck, a threatened species in NSW. Other species observed include plumed whistling ducks, pink eared ducks and black swans.



Darter nest: NSW National Parks and Wildlife Service

Information collected through these surveys is critical for understanding how waterbirds are using the Lakes and how recent flows are providing important feeding and refuge sites for waterbirds after such a prolonged dry period. This work ties in with [CSIRO's GPS tracking project](#) on how waterbirds use the northern Basin. The University of New South Wales is also ready to collect waterbird data should they gather in the next year or so.

## Vegetation monitoring

Vegetation monitoring undertaken ahead of the flows in early March showed vegetation at Narran Lakes Nature Reserve had suffered as a result of drought in recent years. However, floodplain areas are responding to recent flows, with some understory herb and shrub species seen. Lignum resprouting and flowering was observed on the edges of the floodplain.



*A female flowering Lignum plant - Narran River, just below the Narran Lake Road Bridge: University of New England*

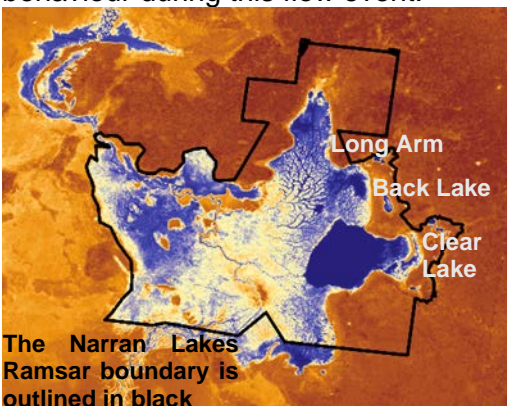
Local indigenous representatives also assisted by providing cultural insights into the plants, animals and artefacts encountered during the surveys.

Further monitoring is being planned for May, to continue to assess the effect of these flows on vegetation health. This will however depend on COVID-19 travel restrictions.

Monitoring from this flow event will also assist in the review and update of information on the [Narran Ramsar Site](#).

## MDBSat monitoring program

The Murray-Darling Basin Authority has been using satellite images to understand the hydrological behaviour during this flow event.



The Narran Lakes Ramsar boundary is outlined in black

Sentinel image showing the extent of inundation on 21 March 2020: MDBA



*Back Lake: NSW National Parks and Wildlife Service*

The next update, which will be the last in this series, will provide a wrap up of this flow event.

## In other news.....

CEWO has also been working with the Queensland Government to establish a fish population resilience project in the northern basin. The project aims to enable a better understanding of how, after such a prolonged dry period with little or no flow in the northern rivers, native fish are recolonising key waterhole habitats and particular river reaches. This study will track the movement of fish (golden perch or yellowbelly, carp and bony bream) throughout the northern basin. By analysing the bony tissue in a fish's ear (called the otolith) scientists can determine the fish's travels throughout the basin.

The Bureau of Meteorology has also released a [report for the summer of 2019/20](#), which saw the Condamine–Balonne go from severe drought to floods that replenished water supplies and allowed the first significant flow into the internationally significant Narran Wetlands in eight years.

## Want to know more?

- Web: <https://www.environment.gov.au/water/cewo/catchment/rebuilding-waterbird-habitat-narran-lakes>
- Email: [ewater@environment.gov.au](mailto:ewater@environment.gov.au)
- Follow us on Twitter: @thecewh
- Contact our Local Engagement Officer Jason Wilson on [Jason.Wilson@environment.gov.au](mailto:Jason.Wilson@environment.gov.au) or 0418 210 389

*The Department acknowledges the traditional owners of Yuwaalaraay/Euahlayi First Nations people country and all country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present.*